## Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

## Listing of Claims:

1.(Currently Amended) A circuit for a lamp, comprising:

a first sub-circuit for connecting to mains voltage of a predetermined frequency for rectifying the mains voltage and forming a rectified mains voltage having a first frequency;

a second sub-circuit connected to the first sub-circuit for providing an alternating current required for the lamp, the alternating current having a second frequency; ~~and~~

a control circuit which is connected to the first sub-circuit and the second sub-circuit and which controls the second frequency of the alternating current subject to the first frequency of the mains voltage rectified by the first sub-circuit, the control circuit controlling a first transistor having a first terminal and a second transistor having a second terminal, the first transistor and the second transistor being connected together at a common terminal;

a first buffer capacitor connected between the lamp and the first terminal; and

a second buffer capacitor connected between the lamp and the second terminal;

wherein the second frequency of the alternating current provided by the second sub-circuit is synchronized with the first frequency, and

wherein a peak-to-peak value of a voltage signal of the rectified mains voltage having the first frequency depends on a combined capacitance of the first buffer capacitor and the second buffer capacitor.

2.(Currently Amended) A circuit for a lamp, comprising:

a first sub-circuit for connecting to mains voltage of a predetermined frequency for rectifying the mains voltage and forming a rectified mains voltage having a first frequency;

a second sub-circuit connected to the first sub-circuit for providing an alternating current required for the lamp, the alternating current having a second frequency; and

a control circuit which is connected to the first sub-circuit and the second sub-circuit and which controls the second frequency of the alternating current subject to the first frequency ~~of the mains voltage rectified by the first sub-circuit~~,

wherein the first sub-circuit comprises a filter with one or more coils and capacitors, a rectifier circuit, a switch and a buffer capacitor that is coupled to its output terminals, wherein a peak-to-peak value of a voltage signal of the rectified mains voltage having the first frequency depends on a capacitance of the buffer capacitor.

3.(Previously Presented) The circuit of claim 1, wherein the second sub-circuit comprises a converter circuit for stabilizing direct current and a switching device for providing a square-wave current of a desired level.

4.(Currently Amended) The circuit of claim 1, wherein the control circuit is connected on one side to a switch in the first sub-circuit and on the other side to one or more switches in a switching device, so that the phase and/or frequency of the lamp current controlled by the switching device is controlled subject to the ~~first~~ predetermined frequency of the mains voltage or a multiple thereof.

Claim 5 (Canceled)

6.(Currently Amended) A circuit for a lamp, comprising:

a first sub-circuit for connecting to mains voltage of a predetermined frequency for rectifying the mains voltage and forming a rectified mains voltage having a first frequency;

a second sub-circuit connected to the first sub-circuit for providing an alternating current required for the lamp, the alternating current having a second frequency; and

a control circuit which is connected to the first sub-circuit and the second sub-circuit and which controls the second frequency of the alternating current subject to the first frequency ~~of the mains voltage rectified by the first sub-circuit~~, the control circuit controlling a first transistor having a first terminal and a second transistor having a second terminal, the first transistor and the second transistor being connected together at a common terminal;

a first buffer capacitor connected between the lamp and the first terminal; and

a second buffer capacitor connected between the lamp and the second terminal;

wherein the control circuit controls a phase of the alternating current provided by the second sub-circuit such that this is the same as a phase of the first frequency ~~of the rectified mains voltage supplied by the first sub-circuit~~, and

wherein a peak-to-peak value of a voltage signal of the rectified mains voltage having the first frequency depends on a combined capacitance of the first buffer capacitor and the second buffer capacitor.

7.(Previously Presented) The circuit of claim 1, wherein the second sub-circuit comprises an igniter for generating voltage pulses across the lamp so as to ignite the lamp.

8.(Previously Presented) The circuit of claim 1, wherein the rectified mains voltage is in the order of magnitude of 400 V and the voltage across the lamp is in the order of magnitude of 100 V to 150 V.

9.(Currently Amended) The circuit of claim 1, wherein ~~a voltage signal of the rectified mains voltage having the first frequency further has a~~ the peak-to-peak value ~~of~~ is 10-100 V.

10.(Currently Amended) A method for operating a lamp, comprising the acts of:

forming a rectified mains voltage by rectifying a supplied mains voltage having a first frequency and bringing a voltage level of the mains voltage to a desired voltage level;

generating from the rectified mains voltage a voltage signal having a second frequency; ~~and~~

generating an alternating current having a third frequency to operate the lamp by controlling a first transistor having a first terminal and a second transistor having a second terminal, the first transistor and the second transistor being connected together at a common terminal;

wherein the third frequency of the alternating current is synchronized with the second frequency;

providing a first buffer capacitor between the lamp and the first terminal; and

providing a second buffer capacitor connected between the lamp and the second terminal;

wherein a peak-to-peak value of a voltage signal of the rectified mains voltage having the first frequency depends on a combined capacitance of the first buffer capacitor and the second buffer capacitor.

11.(Currently Amended) A method for operating a lamp, comprising the acts of:

forming a rectified mains voltage by rectifying a supplied mains voltage and bringing a voltage level of the mains voltage to a desired voltage level;

generating from the rectified mains voltage a signal having a first frequency; and

generating an alternating current having a second frequency by controlling a first transistor having a first terminal and a second transistor having a second terminal, the first transistor and the second transistor being connected together at a common terminal;

wherein the second frequency of the alternating current is controlled subject to the first frequency, and wherein a phase of the alternating current is equal to a phase of the signal;

providing a first buffer capacitor between the lamp and the first terminal; and

providing a second buffer capacitor connected between the lamp and the second terminal;

wherein a peak-to-peak value of a voltage signal of the rectified mains voltage having the first frequency depends on a combined capacitance of the first buffer capacitor and the second buffer capacitor.

12.(Previously Presented) The circuit of claim 3, wherein the desired level is +/-0.8 A for normal operation of the lamp.